STATE OF MARYLAND

DHMH

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November 5, 2008
Public Health & Emergency Preparedness Bulletin: # 2008:44
Reporting for the week ending 11/01/08 (MMWR Week #44)

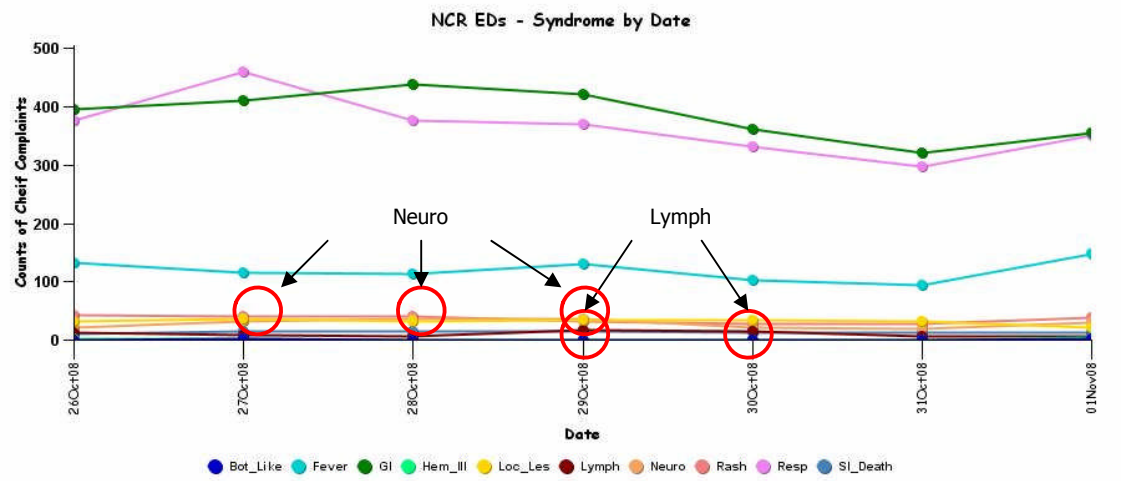
CURRENT HOMELAND SECURITY THREAT LEVELS

National: **Yellow (ELEVATED) *The threat level in the airline sector is Orange (HIGH)**
Maryland: **Yellow (ELEVATED)**

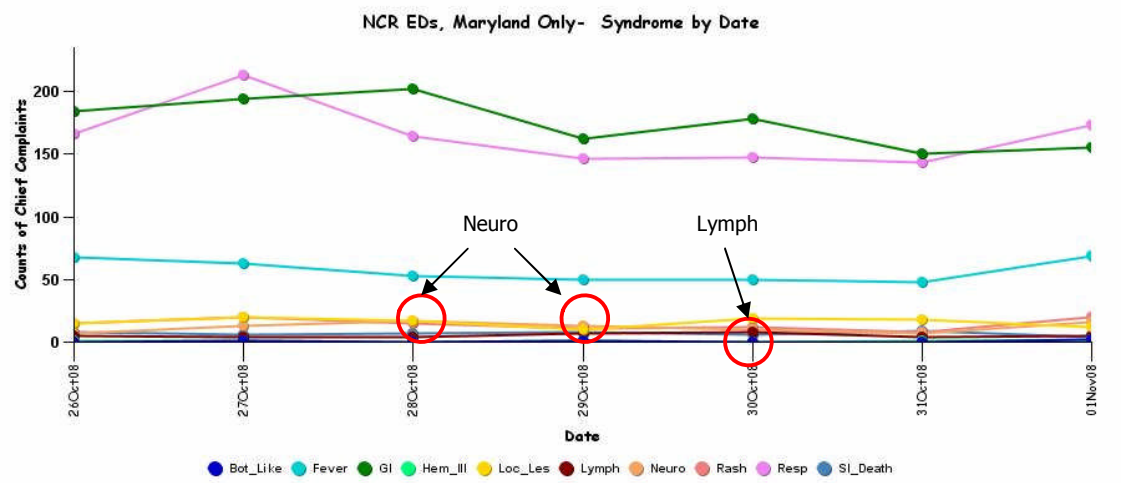
SYNDROMIC SURVEILLANCE REPORTS

ESSENCE (Electronic Surveillance System for the Early Notification of Community-based Epidemics): Graphical representation is provided for all syndromes, excluding the "Other" category, all age groups, and red alerts only. Note: ESSENCE – ANCR Spring 2006 (v 1.3) now uses syndrome categories consistent with CDC definitions.

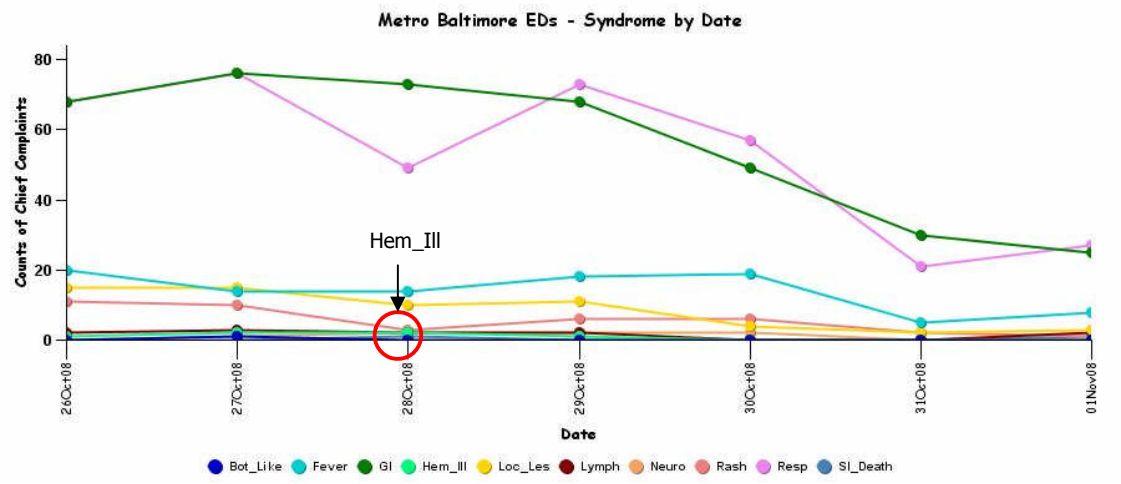
Overall, no suspicious patterns of illness were identified. Track backs to the health care facilities yielded no suspicious patterns of illness.



* Includes EDs in all jurisdictions in the NCR (MD, VA, DC) under surveillance in the ESSENCE system

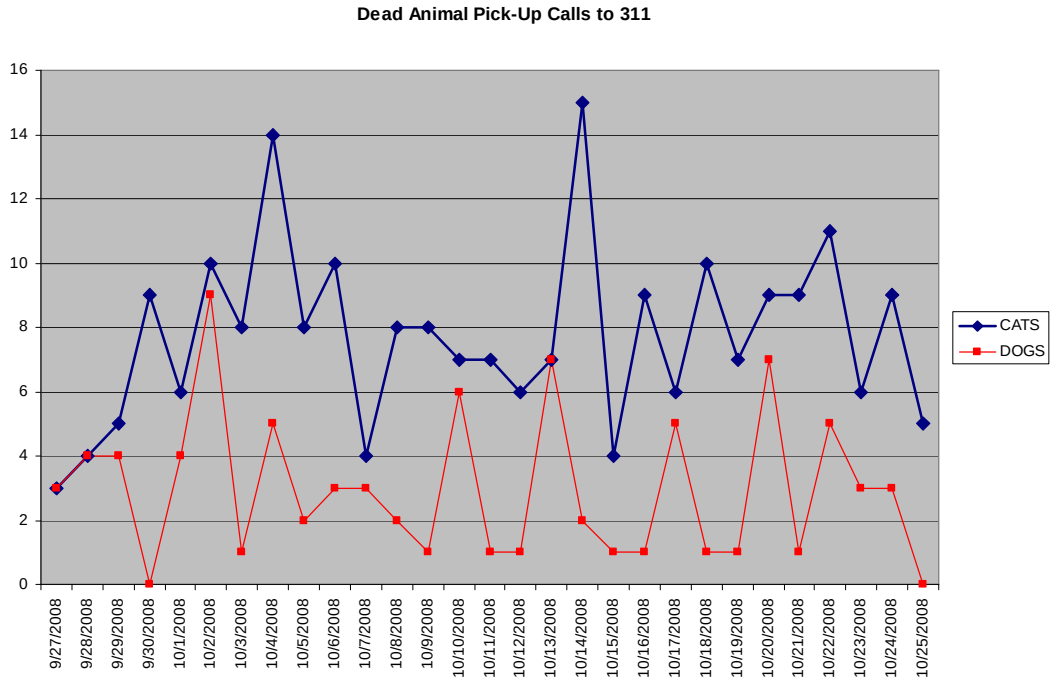


* Includes only Maryland EDs in the NCR (Prince George's and Montgomery Counties) under surveillance in the ESSENCE system



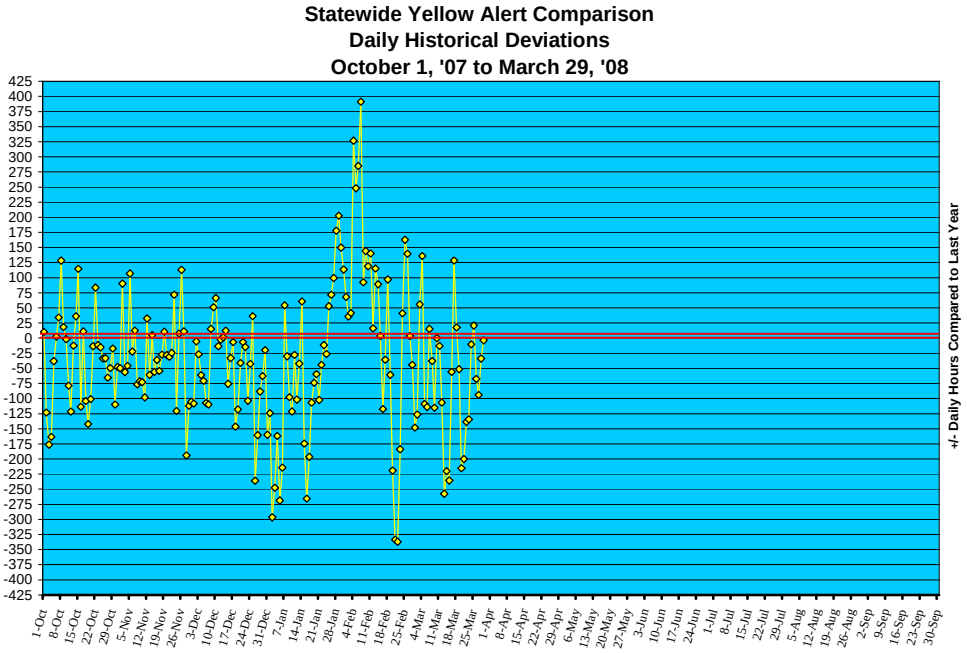
* Includes EDs in the Metro Baltimore region (Baltimore City and Baltimore County) under surveillance in the ESSENCE system.

BALTIMORE CITY SYNDROMIC SURVEILLANCE PROJECT: No suspicious patterns in the medic calls, ED Syndromic Surveillance and the animal carcass surveillance. Graphical representation is provided for animal carcass surveillance 311 data.



REVIEW OF EMERGENCY DEPARTMENT UTILIZATION

YELLOW ALERT TIMES (ED DIVERSION): The reporting period begins 10/01/06.
*Note: No new data available at this time.



REVIEW OF MORTALITY REPORTS

Office of the Chief Medical Examiner: OCME reports no suspicious deaths related to BT for the week.

MARYLAND TOXIDROMIC SURVEILLANCE

Poison Control Surveillance Monthly Update: Investigations of the outliers and alerts observed by the Maryland Poison Center and National Capital Poison Center in September 2008 did not identify any cases of possible terrorism events.

REVIEW OF MARYLAND DISEASE SURVEILLANCE FINDINGS

COMMUNICABLE DISEASE SURVEILLANCE CASE REPORTS (confirmed, probable and suspect):

Meningitis:	**Aseptic**	**Meningococcal**
New cases (Oct 26 - Nov 01, 2008):	2	0
Prior week (Oct 19 - 25, 2008):	9	0
Week#44, 2007 (Oct 28 – Nov 03, 2007):	20	0

6 outbreaks were reported to DHMH during MMWR Week 44 (Oct. 26- Nov. 1, 2008):

2 Gastroenteritis outbreaks
1 outbreak of GASTROENTERITIS associated with a Nursing Home

1 outbreak of GASTROENTERITIS associated with a School Trip

2 Respiratory illness outbreaks
1 outbreak of ILI/PNEUMONIA associated with a Nursing Home

1 outbreak of RSV associated with a Hospital

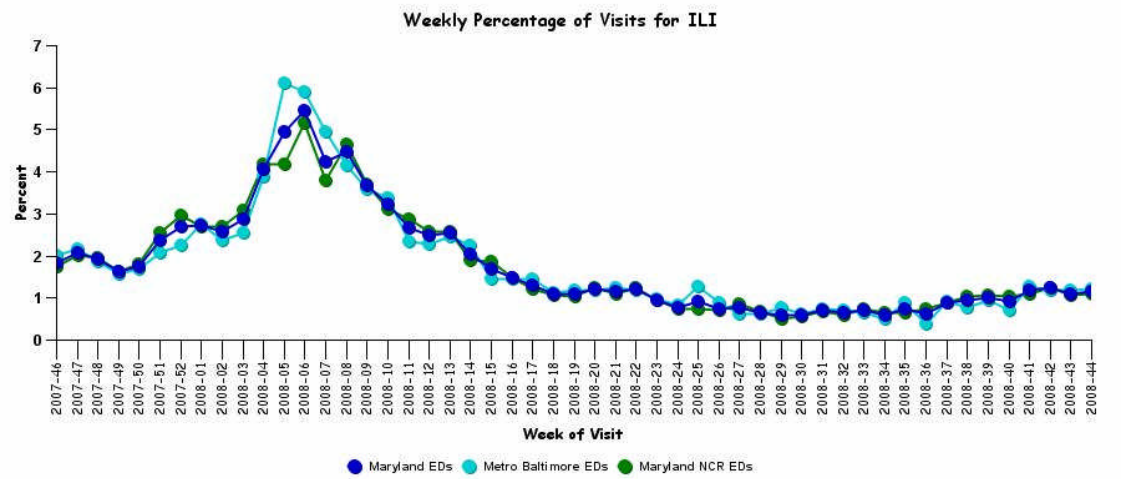
2 Rash illness outbreaks
2 outbreaks of SCABIES associated with Nursing Homes

MARYLAND SEASONAL FLU STATUS:

Seasonal Influenza reporting occurs October through May. There were no lab-confirmed cases of influenza reported to DHMH during Week 44.

SYNDROMIC SURVEILLANCE FOR INFLUENZA-LIKE ILLNESS:

Graph shows the percentage of total weekly Emergency Department patient chief complaints that have one or more ICD9 codes representing provider diagnoses of influenza-like illness. This graph does not represent confirmed influenza.



PANDEMIC INFLUENZA UPDATE / AVIAN INFLUENZA-RELATED REPORTS

WHO Pandemic Influenza Phase: Phase 3/4: No or very little human-to-human transmission/Small clusters with limited human-to-human transmission, suggesting that the virus is not well adapted to humans

US Pandemic Influenza Stage: Stage 0/1: New domestic animal outbreak in at-risk country/Suspected human outbreak overseas

*More information regarding WHO Pandemic Influenza Phase and US Pandemic Influenza Stage can be found at: http://bioterrorism.dhmh.state.md.us/flu.htm

WHO update: As of September 10, 2008, the WHO-confirmed global total of human cases of H5N1 avian influenza virus infection stands at 387, of which 245 have been fatal. Thus, the case fatality rate for human H5N1 is about 63%.

AVIAN INFLUENZA, SUSPECTED (THAILAND): 01 Nov 2008. Livestock officials in Sukhothai Province reported the discovery of the H5N1 virus in domestic chickens raised by Mee Puengwang, a resident of Nong Wong Kwian Village in Swankalok District. Assistant Village Chief Jamnien Puengwang said that 29 families in the village raised a total of nearly 1000 chickens before a number of them began to die of suspicious causes. She said there were no reports of the deaths of these fowls as some villagers were worried that their fighting birds might be slaughtered due to bird-flu fears. After officials declared the discovery, all chickens in Sawankalok District were destroyed and their owners are to receive 32 baht [approx 0.90 USD] per kg for the killed birds. Sukhothai Governor Yothin Samutkheeree has urged all related agencies to keep a close eye on the probable viral spread, especially in the areas where H5N1 was once found. Locals have been asked to report any suspicious deaths of birds immediately. During the months of August and September, bird-flu virus was reportedly spreading in Sawankalok District before it was recently detected again in a nearby district.

NATIONAL DISEASE REPORTS:

EASTERN EQUINE ENCEPHALITIS, HUMAN (NORTHEAST): 27 Oct 2008. A 73-year-old Massachusetts [man] is suffering from eastern equine encephalitis [EEE], the 1st time in 2 years that a Bay State resident has been diagnosed with the highly lethal mosquito-borne illness, state health authorities announced this afternoon [27 Oct 2008]. The Essex County man, whose identity was not disclosed because of patient privacy laws, developed symptoms 21 Sep [2008] while vacationing in Maine. During the 2 weeks before falling ill, the man had traveled extensively in Maine and New Hampshire, enjoying the outdoors. While it is impossible to determine where the man was exposed to the viral disease, Massachusetts health authorities said, it appears likely he caught the illness in another state. After being hospitalized for several weeks in Maine, the man was transferred to a Massachusetts hospital, where his prognosis remains guarded, state disease trackers said. Eastern equine [encephalitis] is the deadliest of the diseases [viruses] spread by mosquitoes, killing up to half of people who develop symptoms. From 2004 through 2006, 13 Massachusetts residents contracted the virus, resulting in 6 deaths. With the arrival of cooler autumn weather, the threat of mosquito-borne illnesses [viruses] such as eastern equine encephalitis and West Nile viruses has significantly subsided. Still, until the 1st hard frost, disease specialists recommend that to avoid being bitten, limit outdoor activity from dusk to dawn, peak time for mosquito activity. If outdoor activity is necessary during those hours, long-sleeved shirts, long pants, and socks can provide protection. Repellants can help, too, including DEET, permethrin, picaridin, or oil of lemon eucalyptus, health authorities said. DEET should not be used on babies younger than 2 months and should be used in concentrations of 30 percent or less on older children. Oil of lemon eucalyptus should not be used on children under the age of 3 years. Draining standing water from gutters, unused flower pots, and wading pools can deprive mosquitoes of necessary breeding grounds. And having secure window screens can prevent the bugs from getting inside homes. (Eastern Equine Encephalitis is listed in Category B on the CDC list of Critical Biological Agents) *Non-suspect case

INTERNATIONAL DISEASE REPORTS:

EASTERN EQUINE ENCEPHALITIS, EMUS (CANADA): 01 Nov 2008. A deadly virus considered rare in this area has devastated the emu population on a farm near [Brockville, Ontario, Canada.] But the area's top public health official says the risk of area residents contracting eastern equine encephalitis (EEE) is very low. Diana Fletcher-deZeeuw and her husband Ian, owners of Noah's Farm on Pettem Road, discovered on Thanksgiving Day [13 Oct 2008] that one of their 28 emus was dead, she said Thursday [30 Oct 2008]. They were devastated to discover this 1st "casualty" would not be the last. "Within the next couple of days, the others all started getting sick," said Diana Fletcher-deZeeuw. "As soon as they start to show signs, it's pretty quick," she added. "By then, they're all infected, so there's not much you can do." By the time the virus had run its terrible course, only 8 emus were left, she said. Dr. Jeff Kaufmann, their veterinarian, said he was not sure what he was dealing with when he did the post-mortem examination on the birds, so he called a pathologist. That pathologist's report came in last week, confirming a diagnosis of eastern equine encephalitis, also known as "Triple-E." As implied by the name, the virus affects horses, but also a number of other animals. "The morbidity rate is pretty high." Kaufmann is not sure whether the virus was spread from emu to emu, but he tends to favor the theory that they were all bitten by infected mosquitoes. Triple-E can also spread to humans and has been linked to at

least one person's death in Massachusetts this year. Its profile resembles that of another virus by now well known in these parts, West Nile virus (WNV). Like the latter, Triple-E spreads through mosquitoes that get it by biting birds, said Dr. Anne Carter, medical officer of health at the Leeds, Grenville and Lanark District Health Unit. The symptoms in humans are similar to those of West Nile, including fever, muscle weakness, a stiff neck and severe headaches. But Carter stressed the chances Triple-E has spread to humans in the area is extremely low, adding anyone bitten by an infected mosquito around the time the Noah's Farm animals were hit would have shown symptoms by now. The recent cold weather, meanwhile, has done in the mosquitoes that could still be transmitting it. (Eastern Equine Encephalitis is listed in Category B on the CDC list of Critical Biological Agents) *Non-suspect case

ANTHRAX, HUMAN (UK): 30 Oct 2008. The Health Protection Agency announced on Saturday [25 Oct 2008] that it has been responding to an isolated case of inhalation anthrax contracted from imported animal hides used for making drums. The patient concerned is being treated in intensive care at a London hospital. As part of an investigation to identify where the anthrax originated from, the Agency will be carrying out some testing at the patient's workshop in Hackney at the start of next week. This will involve a team from the Agency who will wear protective clothing and use a handling tent outside the property. These are standard procedures when this sort of work is carried out, to prevent the potential of any transfer of the bacteria. Professor Nigel Lightfoot, Chief Advisor at the Agency, said, "We have been working with Hackney Council to ensure that all residents of the property have been communicated with and have had an opportunity to ask questions. There is no risk to the inhabitants of this block of flats, or the wider residents in the area. The patient's property is currently secured and there is no-one living there. If this testing reveals the presence of anthrax spores then this information will be communicated to local residents and specialist cleaning will be carried out to remove any trace of anthrax from the property. "We have also been following up any contacts of this patient who may have been exposed to the anthrax spores by being in the same room when the animal skins were being prepared when the drums were made. We have so far given antibiotics to 7 people as a precautionary measure, and no-one else has developed any symptoms of anthrax. It is important to stress that it is the making of animal skin drums that is the risk for coming into contact with anthrax rather than playing or handling drums. "We have stressed to all residents throughout this incident that there is no risk to their health as a result of the case of anthrax, or the testing that will be carried out. We are however keen to reiterate to all individuals who make drums from imported animal skins that there is a risk of coming into contact with anthrax and that they should ensure they are aware of this and take precautions to protect themselves when making these drums." (Anthrax is listed in Category A on the CDC list of Critical Biological Agents) *Non-suspect case

UNDIAGNOSED FATALITIES - ARENAVIRUS (SOUTH AFRICA ex ZAMBIA): 28 Oct 2008. An outbreak of infection due to an arenavirus was identified in South Africa in early October 2008. A total of 5 cases has been reported for the period 12 Sep to 24 Oct 2008. The primary case (case 1) had onset of illness on 2 Sep 2008. An additional 3 secondary cases (case 2, 3 and 4) and 1 tertiary case (case 5) have been confirmed to have an arenavirus infection by laboratory testing. The primary case and 3 secondary cases have died. The tertiary case is currently hospitalized. Ages of cases ranged from 33 to 47 years. 4 cases were female and 1 male. The source of infection is, as yet, unknown for the primary case. The other 4 cases all had potential exposure to blood and/or body fluids of a primary or secondary case in the health-care setting. The causative agent in this outbreak was initially identified as an Old World arenavirus by immunohistochemical tests performed at the Infectious Diseases Pathology Branch of the Centers for Disease Control and Prevention in Atlanta, USA, and on autopsy liver and skin samples taken with biopsy needles and skin punches in the Special Pathogens Unit of the National Institute for Communicable Diseases, National Health Laboratory Service, Sandringham (SPU-NICD/ NHLS), South Africa. (Arenavirus is listed in Category A on the CDC list of Critical Biological Agents) *Non-suspect case

CHIKUNGUNYA (THAILAND): 28 Oct 2008. The Department of Disease Control of the Thai Ministry of Public Health (MOPH) has released the information on the chikungunya outbreak to the news media during the last 2 weeks. In summary, we confirmed the outbreak of chikungunya in one village of Narathiwat province by HI (hemagglutination inhibition) and PCR (polymerase chain reaction) from [the serum of almost] 40 patients. PCR conducted on a pool of _Aedes albopictus_ caught in the affected village was also positive for chikungunya virus. The major clinical symptoms seen are fever, rash, and persistent polyarthralgia with arthritis. The affected population is [more than] 80 people. We have alerted the nearby province and have received information on some more similar cases from a nearby area. The total number of reported cases is now almost 200 cases. The vector control and education program for villagers are going on. We have shared information on this outbreak with SEARO (SouthEast Asian Regional Office of the World Health Organization) and all the MBDS countries as well. (Emerging Infectious Diseases are listed in Category C on the CDC list of Critical Biological Agents) *Non-suspect case

CRIMEAN-CONGO HEMORRHAGIC FEVER (PAKISTAN): A total of 3 victims of [Crimean-Congo haemorrhagic fever (CCHF)] virus, from Quetta, Chaman, and Sanjavi areas, have been admitted to the Chest Hospital [in Quetta, Balochistan province -- previously spelled Baluchistan] over the past 4 days. Hospital sources said a 35-year-old woman from Sanjavi area in Ziarat district, who was bleeding from nose and mouth, was admitted on Tuesday [14 Oct 2008] and kept in the isolation ward. Another woman from Quetta and a 26-year-old man from Chaman also had symptoms of CCHF virus [infection]. "We have put them under observation in the isolation ward." They said most of [CCHF] virus cases usually came from Loralai, Zhob, and Musakhail. The sources said over a dozen patients had been admitted over the past 2 months and 3 of them died. "Most of the patients were shepherds." Around 100 people have [contracted CCHF virus infection] in the province over the past 2 years. The health department has established an isolation ward in the Fatima Jinnah Chest Hospital for [CCHF virus infection] and other viral diseases. (Viral Hemorrhagic Fevers are listed in Category A on the CDC list of Critical Biological Agents) *Non-suspect case

PLAGUE, PNEUMONIC (MADAGASCAR): 26 Oct 2008. Morarano village, 40 km east of Moramanga, has been hit by the plague; 3 persons of the same family have died in recent days and 4 people died one by one of plague in Ambohidray station, a rural commune of Morarano in the district of Moramanga, according to the declaration of death made to basic health center (CSB) Level II, Morarano. A 20-year-old was the 1st victim on 6 Oct 2008. He caught the disease while keeping his parents' cattle in the field at Ampasimbe, a village which is located 15 km from the town. Field rats, common in this region, are the reservoir of the disease. In ignorance of the cause of the death, he was buried in the family vault. The alert was triggered by learning of the death of the father 2 days later. The mother also soon died. The test strip to confirm that it was the plague was positive. She presented symptoms of pneumonic plague -- cough with bloody sputum -- said Dr Mamitiana Raveloarijaona, medical director of the CSB Morarano. People panicked when another young man of 16 years died on 15 Oct 2008. He lived in the Ampandrana district near Ambohidray station. Two more fever patients are still under treatment. Approximately 400 people have received basic treatment with sulfadoxine because they are in contact with the outbreak of plague, said the chief doctor of Morarano. Plague follows an epidemiological cycle in Madagascar. According to Dr. Rolland Robinson, director of emergencies and the fight against diseases (DULM), we are in the year of its return, which happens every 5 years. In such a context, the population must be sensitized to clean the environment. "We must trap the rats alive and kill them by throwing them into fire or water to kill their fleas along with them," he suggests [if they are killed in the trap, their fleas disperse. - Mod.JW]. In any case, Madagascar is home to several plague foci; Moramanga, in the region of Alaotra Mangoro, is one of them. (Plague is listed in Category A on the CDC list of Critical Biological Agents) *Non-suspect case

OTHER RESOURCES AND ARTICLES OF INTEREST:

More information concerning Public Health and Emergency Preparedness can be found at the Office of Preparedness and Response website: http://bioterrorism.dhmh.state.md.us/

Maryland's Resident Influenza Tracking System: www.tinyurl.com/flu-enroll

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NOTE: This weekly review is a compilation of data from various surveillance systems, interpreted with a focus on a potential BT event. It is not meant to be inclusive of all epidemiology data available, nor is it meant to imply that every activity reported is a definitive BT event. International reports of outbreaks due to organisms on the CDC Critical Biological Agent list will also be reported. While not "secure", please handle this information in a professional manner. Please feel free to distribute within your organization, as you feel appropriate, to other professional staff involved in emergency preparedness and infection control.

For questions about the content of this review or if you have received this and do not wish to receive these weekly notices, please e-mail me. If you have information that is pertinent to this notification process, please send it to me to be included in the routine report.

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